

WHAT IS CLAIMED IS:

- 1                   1.     In a wireless communication system having mobile subscriber units  
2     and a plurality of fixed network devices located at cell sites, a method for acquiring and  
3     managing a plurality of communication modes at each subscriber unit comprising:  
4                   first sensing whether the subscriber unit is static or mobile from the nature and  
5     quality of the communication links with nearby network devices; thereafter  
6                   enabling an acquisition protocol suited to static mode and mobile mode for  
7     said subscriber unit; and  
8                   enabling an acquisition protocol suited to mobile mode for mobile subscriber  
9     units and static mode for fixed subscriber units.
- 1                   2.     The method according to claim 1 further comprising:  
2                   initiating procedures to change acquisition mode from static mode to mobile  
3     mode upon failure of the subscriber unit to sense a preselected number of consecutive  
4     scheduled polling packets sent by a linked device.
- 1                   3.     The method according to claim 1 further comprising:  
2                   initiating procedures to determine whether it is appropriate to change  
3     acquisition mode from static mode to mobile mode upon failure to transmit a preselected  
4     number of consecutive data packets
- 1                   4.     The method according to claim 3 further comprising:  
2                   upon decision to change to mobile mode, foregoing best node qualification.
- 1                   5.     The method according to claim 3 further comprising:  
2                   upon decision to change to mobile mode, foregoing registration of location  
3     with a name service.
- 1                   6.     The method according to claim 3 further comprising:  
2                   upon decision to change to mobile mode, transmitting sync packets at a higher  
3     repetitivity.
- 1                   7.     The method according to claim 1 further comprising:  
2                   upon decision to change to mobile mode, foregoing third party query  
3     processes.

1           8.       The method according to claim 3, further comprising:  
2           upon decision to change to mobile mode, foregoing best node qualification;  
3           foregoing registration of location with a name service;  
4           foregoing third party query processes; and  
5           transmitting sync packets at a higher repetitivity.

1           9.       The method according to claim 1, further comprising:  
2           upon a subscriber unit changing its BMC, causing said subscriber unit to send  
3           forwarding packets to its former bestnode, and  
4           updating a new corresponding path to a gateway resource.